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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 09/539,032      | 03/30/2000  | Samir Kumar Brahmachari | 07064-01001         | 7985             |

7590 11/15/2001

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EXAMINER.

MORAN, MARJORIE A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1631     | 9            |

DATE MAILED: 11/15/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                            |                    |
|------------------------------|----------------------------|--------------------|
| <b>Office Action Summary</b> | Application No.            | Applicant(s)       |
|                              | 09/539,032                 | BRAHMACHARI ET AL. |
|                              | Examiner<br>Morjorie Moran | Art Unit<br>1631   |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) 1-12 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: *detailed action* .

***Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to a computer based method for identifying invariant peptide motifs, classified in class 702, subclass 27.
- II. Claim 10, drawn to a microprocessor based system for comparing an joining peptide sequences, classified in class 712, subclass 26.
- IV. Claim 11, drawn to a computer based system comprising a CPU, various programs, a display, and a user interface device, classified in class 345, subclass 700.
- V. Claim 12, drawn to a method of assigning function to a protein, classified in class 702, subclass 19.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the methods of Groups I and IV recite different method steps and are directed to different results. The method of Group I recites annotating, comparing, and validating steps not recited in the method of Group IV whereas the method of Group IV recites a prediction step not recited in the method of Group I. In addition, each method may be carried out with knowledge of or reference to the steps or results of the other method. For these reasons, Groups I and IV are separate and distinct.

Each of Inventions I and IV is unrelated to either of Inventions II or III. Groups II and III recite products which are not limited to be those used with the method of either Group I or Group IV. While the microprocessor based system of Group II and the computer system of

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Group III may be used to carry out the methods of Groups I and IV, they may also be used to carry out other methods of comparing peptide sequences. In addition, it is noted that the products of Groups II and III may be used with a plurality of methods (i.e. "the methods of the invention"). For these reasons, each of Groups II and III is separate and distinct from each of Groups I and IV.

Groups II and III are unrelated. While the product of each Group may be used with similar methods, the claims of each Group recite different product limitations, and are therefore directed to different, unrelated products.

These inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, therefore restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and the search required for Group II or III is not required for Group I or IV, the search required for Group I is not required for Group IV, and the search required for Group I or IV is not required for Group II or III, restriction for examination purposes as indicated is proper.

#### ***Election of Species***

This application contains claims directed to the following patentably distinct species of the claimed invention: (a) organisms as recited in claim 3; (b) conserved sequence motifs as recited in claim 4; and (c) proteins as recited in claim 6.

If Group I above is elected, applicant is further required under 35 U.S.C. 121 to elect a single disclosed species from group (a) AND a single disclosed species from group (b) (i.e. by SEQ ID NO) AND a single disclosed species from group (c), above, for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-2, 5 and 7-9 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention and a species from EACH of groups (a), (b), and (c) above to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marjorie A. Moran whose telephone number is (703) 305-2363. The examiner can normally be reached on Monday to Friday, 7:30 am to 4 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (703) 308-4028. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4556 for regular communications and (703) 308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to a patent analyst. Dianiece Jacobs, whose telephone number is (703) 305-3388.

*Marjorie A. Moran*  
Marjorie A. Moran  
Patent Examiner  
November 9, 2001